The unorganised sector and access to finance in rural India

Kar, Saibal and Dutta, Meghna

Centre for Studies in Social Sciences, Calcutta

15 February 2014

Forthcoming: Ashima Goyal (Ed.) Oxford Handbook of the Dynamic Indian Economy, New Delhi:

Oxford University Press.

The Unorganised Sector and Access to Finance in Rural India

Saibal Kar*
Centre for Studies in Social Sciences, Calcutta, India
IZA, Bonn, Germany

and

Meghna Dutta
Centre for Studies in Social Sciences, Calcutta

Abstract: A large number of studies have predominantly focused on the urban informal manufacturing sector broadly classified as the NDMEs and OAMEs. However, their rural counterparts, despite covering two-thirds of the units overall, are often neglected. These organizations suffer largely from lack of access to formal credit. This chapter offers an in-depth analysis of the access to finance by rural unorganised sectors in comparison to the larger agricultural sector. We also provide a sector-wise and state-wise analysis of volatility of gross value added and fixed assets for various industries within the realm of the rural unorganised sector in India. Finally, we discuss the role of micro-credit organizations in linking the formal credit agencies to the unorganised units in rural India.

Keywords: agriculture, unorganised manufacturing, access to credit, banks, India.

JEL Classification: L6, Q1, G2

*Address for Correspondence:
Centre for Studies in Social Sciences, Calcutta,
R-1, B. P. Township, Kolkata 700 094, India
Ph: +91-33-2462 7252. Fax: +91-33-2462 6183.
E-mails: Kar: saibal@cssscal.org; Dutta: 86meghna@gmail.com

Acknowledgements: The authors are grateful to the editor and an anonymous reviewer for comments and suggestions. Saibal Kar wishes to thank Shrabani Saha and the School of Accounts, Finance and Economics, Edith Cowan University, Australia for their generous support during this research. The usual disclaimer applies.

1. Introduction

Economic and financial liberalization in India, as it had been argued in various places, was a reaction to the imminent external crisis that the country was experiencing by the beginning of 1990s. The reasons put forth by the ruling government at the time have been contested in different forums and it has also been stated that the reforms should have begun much earlier. Nonetheless, whatever might have been the driving force behind the economic and financial reforms, there is little doubt that the country was unprepared to adopt it at the time. In fact, the polity expected that the depth and spread of various other distortions in the country would automatically correct themselves once the more prominent sources are dealt with. For example, while trade and financial reforms aimed at removing some of the distortions responsible for the known maladies within the formal sector, the evolving conditions of the large unorganized sector were little known to the academic and policy communities in the country, despite recognition of the fact that the unorganized sector employed approximately 90% of the working population including those in the agricultural sector (NCEUS, 2009). Thus, the reforms brought in a watershed in the way various sectors in the 'formal' economy functioned and presently offers a natural experiment to observe if the changes were significant enough for some of the crucial sectors in the country in the presence of large informal counterparts. In this connection, we focus on a specific aspect of the rural economy that continues to be of prime importance in the development discourses in India and might offer related inferences for other developing countries.

In India, the financial liberalization was implemented at a time when the rural credit market was marked by imperfections and fragmentations. Therefore, much of the benefits of liberalization in terms of coverage, ease of access and lower as well as fairer repayment conditions failed to reach the rural poor. It is well-known that sections of the population in a developing country, particularly those in the labour surplus agricultural sector, are comparatively more vulnerable to the credit malpractices compared to their urban counterparts. Hence, the burden of indebtedness in rural India was on those who resorted to informal credit institutions as the most important source to borrow from.[1] Despite major structural changes in the credit institutions and forms of rural credit, the engagement of the rural masses with the informal credit market has been one of the most exploitative and persistent features of rural India (Basu, 2006). In this connection, Jeromi (2007) for example, discusses the undesirable aspects of informal money lending in Kerala and its overall impact on the society. Needless to mention, the predicament of rural borrowers is a historical phenomenon in India as one observes from earlier documents. Among others, Sinha (1976) presents a worrisome account of the rule of moneylenders in rural societies in Dhanbad. In the same vein, the Rural Finance Access Survey (RFAS, 2003) indicates that 70 percent of marginal and landless farmers do not have bank accounts and about 87 percent have no access to credit from a formal source. The study also found that 48 percent of marginal and landless farmers have borrowed from an informal source at least once in the previous twelve months, at interest rates averaging 48 percent per year. On the other hand, National Sample Survey Organization (2006) reports that the informal sources account for about 44 percent of outstanding loans taken by unorganised manufacturing enterprises.

Consequently, efforts have been made to disentangle borrowers from the clutches of informal lenders. In addition, some of the measures that the government resorted to in an

---

[1] Informal credit institutions imply those that are not regulated by public authority. The terms and conditions associated with such loan are personalized and vary in accordance with the bargaining power of the borrower on a case-to-case basis.

attempt to arrest the adverse effects of liberalization included expansion of the institutional structure and coverage of formal-sector lending institutions, initiation of directed lending, and providing for concessional or subsidized credit (Basu, 2006). In the period between nationalization and liberalization, banks had opened more rural branches in states having fewer branches per capita as of 1961. This trend was, however, reversed after liberalization (Burgess and Pande, 2003). The number of branches of scheduled commercial banks, in rural areas, increased from 1833 in 1969 to 34791 in 1990. On the other hand, between 1990 and 2012 only 862 new branches were opened (RBI, 2012). However, note that, according to the Reserve Bank of India (2006), during 2005-06 the credit advanced by scheduled commercial banks rose by 36 percent. The government also accepted the recommendations of the task force formed under Prof. Vaidyanathan in a bid to revive the short-term rural co-operative banking institutions. In view of their importance as lenders, supporting banks were encouraged to merge with the regional rural banks (RRBs) that they sponsored, state-wise, in order to strengthen them. By 2006, the Government had issued notifications providing for amalgamation of 93 RRBs into 27 new RRBs, sponsored by 15 banks in 12 States (RBI, 2006).

The EPW Research Foundation (2007) subsequently shows how the objective of a rapid credit expansion is stifled without the expansion of the rural branch network of the dominant public sector banks. In fact, studies have found a positive impact of branch expansion in rural areas and greater positive impact of access to finance on poverty (Banerjee and Newman, 1993; Burgess *et. al.,* 2005). However, the steady reduction in the number of branches in rural areas and increasing demand by banks for collaterals tends to invalidate and wither the benefits that were envisaged by policy makers before bank nationalization (Nair, 2000). The reversals were so severe that it led the RBI (2006, pp. 55) to report that “despite the spread of banking facilities in rural areas and availability of bank finance at reasonable rates, farmers in several areas are still in distress", and proposed the formation of a working group to suggest measures for assisting distressed farmers, including provision of financial counselling services and introduction of a specific Credit Guarantee Scheme under the Deposit Insurance and Credit Guarantee Corporation (DICGC) Act.

The All India Debt and Investment Survey (AIDIS) by NSSO also reveals that the loans taken from moneylenders in the total credit stock of rural households have increased from 17.5 percent in 1991 to 29.6 percent in 2002. This indicates an increase in indebtedness of rural households over the past decade to informal lending institutions. However, this can also mean an increased access to credit. According to AIDIS (1991), just 16 percent of rural households had formal loan outstanding. Based on the World Bank-NCAER Rural Financial Access Survey (2003), the corresponding number was 21 percent (Basu, 2006).

Several other factors, such as the amount of processing time required to obtain the loan and the bribes that need to be paid makes access to credit from the formal sector a difficult alternative. Evidently, it raises the effective cost of borrowing for the poor credit-starved households. According to RFAS (2003, Table 1), 26.8 percent households have reported paying bribes for getting a loan from banks. Bribe paid as a percent of the loan amount was 10.1 percent for banks, 18.2 percent for RRBs and 19.9 percent for co-operatives. For the RRBs, which were established by the government of India through an ordinance and then by a legislation to improve the credit accessibility to the poor, the average time taken to process a loan application was as long as 28.5 weeks. Most of the loans given by commercial banks, RRBs, and cooperatives required collaterals. 89 percent of households who borrowed from

RRBs, and 87 percent of households who borrowed from commercial banks reported that they had to provide collateral. The value of collaterals required as a proportion of the loan, however, remains relatively low in the case of banks and RRBs, at under 10 percent, but high in the case of government schemes (see Table 1).

Table 1: *Sources of Formal Borrowing and the Associated Costs* (2003)

Indicators	Banks	RRBs	Cooperatives	Government Schemes	Others
Interest rate (median) % p.a.	12.5	11	11	14	14
Loan amount received as % of amount applied	91.8	88.2	83.5	86.6	93.9
Percentage of households reporting bribes	26.8	27	9.7	27.27	23.21
Bribe as % of amount approved	10.1	18.2	19.9	42.3	8.3
Time taken to process a loan application (weeks)	33	28.5	24	8.9	14.3
Collateral required (as % of loan)	87	89.3	72.9	58.3	83.1
Value of collateral (as % of loan)	9.1	9.5	11	26.8	24.3

Source: RFAS, 2003.

The performance of the scheduled commercial banks and other bank based financial intermediaries since nationalization, and up to the year 2000 are presented in table 2. It is evident that the priority sector lending [2], which had been an important agenda of the

[2] Advances to Priority Sectors consist of the advances to (1) agriculture and allied activities, (2) small scale industries including loans for setting up industrial estates, (3) small road and water transport operators, (4) small business, (5) professional and self-employed persons, (6) retail trade, (7) state sponsored organisations for scheduled castes/scheduled tribes, (8) education, (9) housing, (10) Self Help Groups (SHGs)/Non-Governmental Organisations (NGOs), (11) consumption loans granted under the consumption credit scheme, (12) net funds provided to sponsored Regional Rural Banks, (13) advances to software industry units having credit limit up to Rs. 1 crore, (14) advances to food and agro-based processing sector which do not satisfy Small Scale Industry norms, (15) Credit offered to weaker sections under different schemes and (16) investment in venture capital.

government since 1968, has suffered a setback after liberalization. Priority sector lending by scheduled commercial banks as a proportion of total credit advanced increased significantly from 14 percent in 1969 to 34.4 percent in 1993. However, between 1993 and 2011, it declined to 33.9 percent.

Table 2: *The Extent of Commercial Banking in India, various years.*

Indicators	June 1969	1993	1995	1999	2000	2011
No. of Commercial Banks	89	276	284	303	297	169
(a) Scheduled Commercial Banks	73	272	281	302	297	165
Of which: Regional Rural Banks	-	196	196	196	196	82
(b) Non-Scheduled Commercial Banks	16	4	3	1	-	4
Number of Bank Offices in India	8262	61169	62367	64939	65412	92063
(a) Rural	1833	35389	33004	32857	32734	34208
Population per office (in thousands)	64	14	15	15	15	13.1
Deposits of scheduled commercial banks in India (Rs. in Crore)	4646	274938	386859	714025	851593	5207969
Credit of scheduled commercial banks in India (Rs. in Crore)	3599	154838	211560	368837	454069	3942082
Scheduled commercial banks' Advances to Priority Sector (Rs. in Crore)	504	51739	69209	126309	155779	133733
Share of Priority Sector Advances in Total Credit of scheduled commercial banks (%)	14	34.4	33.7	35.3	35.4	33.9
Share of Priority Sector Advances in Total Non-Food Credit of scheduled commercial banks (%)	15	36.1	35.8	37	37.4	34.5

Source: Reserve Bank of India Bulletin (various years)

Based on some of these facts and figures we attempt to discuss the degree of financial inclusiveness of the rural population in various states of India. It should be borne in mind that the rural sector in India is largely composed of the agricultural sector and the rural formal and informal industries, albeit the share of the formal sector is quite thin. Therefore, in order to comprehend the role of the current financial system, we separately examine the two major sectors in the rural areas, namely, agriculture and the unorganised manufacturing. While the literature talks extensively about the supply of credit to agriculture (Basu 2006, Chavan 2005, Jagan Mohan 2004), an in-depth analysis of the rural unorganised manufacturing sector remains somewhat neglected. The chapter also attempts to fill this gap.

With unorganised manufacturing sector emerging as a substantive and growing sector within the total manufacturing sector *per se*, its contribution to the rural economy can hardly be neglected. According to the National Sample Survey Organisation (NSSO) of India, during 2005-06, an estimated 17 million unorganized manufacturing enterprises were in operation at the all-India level, of which 71% were located in rural areas. This bears out the fact that the rural unorganized manufacturing enterprises play a non-trivial role in the development of the rural economy. This primarily motivates us to discuss the financial linkages and inclusiveness of rural organizations outside of agriculture.

The study is organized as follows. We discuss the data sources in Section 2 followed by a brief analysis of the agricultural sector. In section 3 we discuss the rural unorganised manufacturing sector as the focus of this study. Section 4 deals with volatility in the informal sector as a whole and income volatility in the unorganized manufacturing sector in particular. Section 5 discusses micro-credit organizations as a link between formal credit and the informal manufacturing units in rural India and concludes.

2. Agriculture and Finance

Data Sources

The data for this study is obtained from the 62nd round of Unorganised Manufacturing Enterprise Survey by National Sample Survey Organization (NSSO), All India Debt and Investment Survey by NSSO, the survey conducted by the National Council of Applied Economic Research and the World Bank of India (a survey of 6000 households and micro-enterprises in two states - Andhra Pradesh and Uttar Pradesh), Reserve Bank of India (RBI) and National Bank for Agricultural and Rural Development (NABARD). As stated above, we begin by discussing the financial issues with the agricultural sector and subsequently that of the rural unorganized manufacturing sector. We define 'rural' unorganized manufacturing sector as those unorganized manufacturing enterprises[3] (OAME, NDME and DMEs taken together) that the NSSO reports to be located in rural areas. We also follow the same definition of 'rural areas' as followed by NSSO.

The Agricultural Sector

There are various reasons why farm households need loans. Ray (1998) has identified demand for fixed capital at the household level to start up new production or to improve and modernise existing production techniques. On the other hand, it is also observed that the demand for working capital comes mainly from the need to buy raw materials such as seeds, fertilizers, pesticides, to carry the output to the market and as consumption credit, comprising the three important sources of demand for credit. However, there are several bottlenecks in the

[3] The unorganized manufacturing sector is defined by NSSO as: "all manufacturing enterprises except those registered under section 2m(i) and 2m(ii) of Factories Act, 1948 and Bidi and Cigar Workers (conditions of employment) Act, 1966 and, all manufacturing enterprises except those run by Government (Central Government, State Governments, Local Bodies)/Public Sector Enterprises" (see appendix 2 for the various sub-clauses under Factories Act, 1948).

credit supply chain. Formal lending institutions are less keen to lend to the poor because agriculture is inherently risky, and if the crop fails there is very little option through which the farmer can repay the loan. To combat this problem the institutional agencies demand collateral, but the collateral offered by poor farmers are often not acceptable to banks. For, example a landless labourer might offer his labour as collateral (which an informal lender will accept), but a formal financial institution like a bank obviously cannot accept it. It also clearly suggests that the practice of bonded labour continues in relation to informal financial facilities in rural India. Again, a small farmer may offer his land as collateral but the bank might not find it profitable because the cost of selling it in case of a default could be too high (*ibid.*). This is over and above the usual moral hazard of monitoring and policing a borrower that restricts the formal financial institutions from offering extensive credit facilities. Much of these aspects has been discussed in elegant detail in Basu (1997) and therefore do not require further deliberation.

Nevertheless, the statistics of indebtedness in farm households in India shows greater reliance on institutional credit over the last few decades although the share of moneylenders continues to be reasonably high. But during the last decade there has been a decline in the share of institutional credit as a source of debt in farm households. For the farm households, the proportionate share of debt from institutional sources fell from 66.3 percent in 1991 to 61.1 in 2002 (Table 3).

Table 3: *Percentage share of debt of cultivator households from different source of credit in India* (1951-2002)

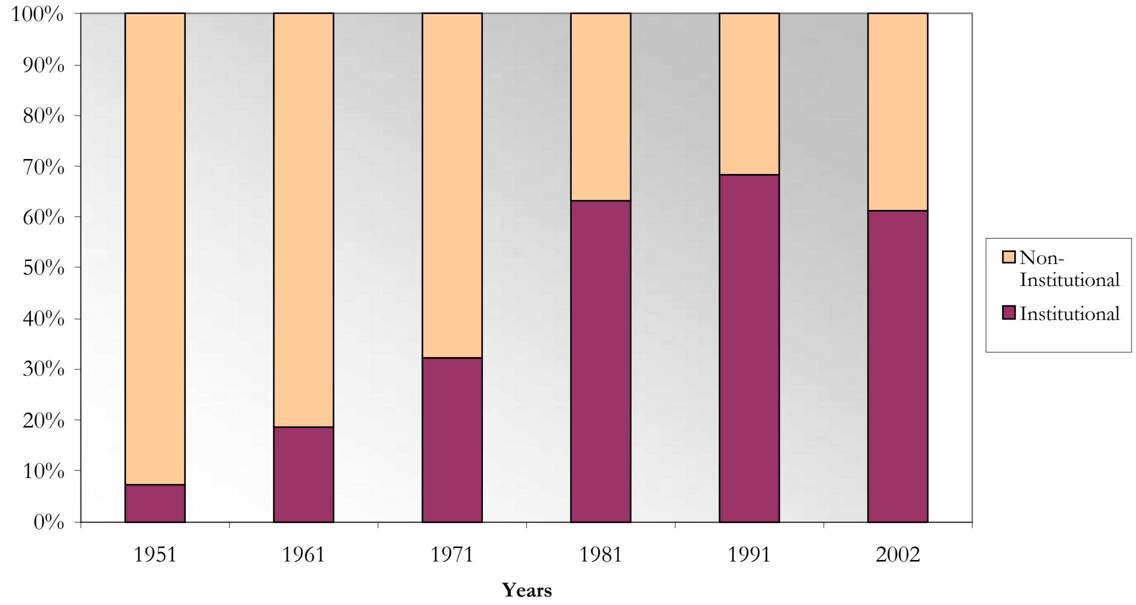
Source of Credit	1951	1961	1971	1981	1991	2002
Institutional	**7.3**	**18.7**	**31.7**	**63.2**	**66.3**	**61.1**

Cooperative Societies/Banks	3.3	2.6	22	29.8	30	30.2
Commercial Banks	0.9	0.6	2.4	28.8	35.2	26.3
Non-Institutional	**92.7**	**81.3**	**66.3**	**36.8**	**30.6**	**38.9**
Money Lenders	69.7	49.2	36.1	16.1	17.5	26.8
Unspecified	-	-	-	-	3.1	-
Total	100	100	100	100	100	100

Source: Lok Sabha Unstarred Question No. 857, dated 25.02.2011.

Fig 1 also displays the proportion of loan taken by cultivator households from institutional and non-institutional sources. Loans taken from institutional sources show a steady increase in the total loan taken by these households, however, the share of formal sources has declined since 1991. The clear withdrawal of the formal lending institutions from rural areas, as shown above, after liberalization, has been explained as a systematic design to remain profitable. It is well-known that borrowers in rural areas often do not have sufficient assets to provide as collaterals. Consequently, in case of non-recovery of the loan it leads to loss/NPA (non performing assets) for the banks with reportedly technical restraints in capturing and selling off the collaterals. Moreover, under the direct finance schemes of lending, the crop produce is regularly kept as collateral. This becomes extremely risky as, in case of a crop failure the entire amount of loan proves to be bad debt for the bank. The lending institutions argue that in a bid to remain competitive, the banks have started to look away from the rural sector as part of their strategic decisions.

Figure 1: Percentage share of debt of cultivator households by source of credit in India



Source: Reserve Bank of India Bulletin (Various years)

A study of the distribution of farm households across states by source of loan (Table 4) shows that Andhra Pradesh accounts for the highest number of farmer households indebted to moneylenders (at 57 percent) followed by Tamil Nadu (at 52 percent). In states where the dominance of moneylenders is low, traders emerge as a substitute for lending agencies. Traders account for 88 percent, 51 percent, 30 percent, and 70 percent of loans contracted in Jammu and Kashmir, Nagaland, Mizoram and Sikkim, respectively. At the all-India level, 29 percent of farm households were indebted to moneylenders whereas only 27 percent took loans from banks.

Table 4: *Number* per *100 distribution of Indebted Farmer Households, by Source of Loans and States* (2003)

State	Govt	Co-op society	Bank	Money lender	Trader	Relatives & Friends	Doctor, Lawyer	Others
Andhra Pradesh	3	20	31	57	9	6	1	4
Arunachal Pradesh	4	0	10	0	33	49	0	21
Assam	3	3	9	10	17	54	1	6
Bihar	2	4	17	44	5	26	2	7
Chhattisgarh	2	37	27	20	17	12	2	5
Gujarat	0	40	23	8	10	29	1	1
Haryana	2	44	30	29	9	9	2	1
Himachal Pradesh	5	24	28	5	22	32	2	4
Jammu & Kashmir	4	1	4	1	88	5	0	0
Jharkhand	6	0	38	22	8	28	1	1
Karnataka	2	23	32	34	5	12	1	3
Kerala	8	46	42	16	6	12	1	5
Madhya Pradesh	4	37	23	22	23	17	2	2
Maharashtra	2	61	29	7	6	11	2	4
Manipur	4	0	2	25	11	57	0	6
Meghalaya	2	0	0	6	0	91	0	0
Mizoram	10	2	21	0	30	37	0	0
Nagaland	4	2	14	0	51	28	0	0
Orissa	2	30	36	23	4	16	0	3
Punjab	1	38	19	28	18	21	1	2
Rajasthan	2	15	21	40	23	14	2	2
Sikkim	6	0	12	5	70	14	0	2
Tamil Nadu	3	33	23	52	2	11	0	2
Tripura	11	3	32	2	29	20	0	4
Uttar Pradesh	4	13	30	26	9	28	3	4
Uttaranchal	8	17	40	7	5	25	0	7
West Bengal	10	19	22	15	29	23	2	4
Group of UTs	9	15	18	30	9	31	0	1
India	3	26	27	29	12	18	2	3

Source: NSSO (2003)

Contextualizing this data with the objectives of both nationalization and liberalization leads one to conclude that those sections of rural India that heavily depends on agriculture for their livelihood remains extremely starved for credit. Moreover, the share of credit from cooperative societies decreased by 7 percentage points to 21.6, during the same period (Table 5). This drop was however, compensated partly by the rise in the share of commercial banks (5.7 percentage points) and partly by direct government interventions (2.1 percentage points). Among the non-institutional agencies, the share of debt to professional money-lenders rose slightly from 8.3 percent in 1981 to 10.5 percent in 1991. In the case of cultivator households, the share of debt from co-operative societies/banks during 1981-91 decreased and this seems to have mainly affected the share for all rural households. On the other hand, the share of debt from professional money-lenders is reported to have increased for cultivator households. A sharp rise of 10 percentage points was recorded in the share of debt from commercial banks in the case of non-cultivator households.

Table 5: *Distribution of cash-debt according to credit agencies*, 1971-91 (%)

Credit Agency	Rural Households								
	Cultivators			Non-cultivators			All Household		
	1971	1981	1991	1971	1981	1991	1971	1981	1991
Institutional	**31.7**	**63.2**	**66.3**	**10.8**	**36.7**	**55.3**	**29.2**	**61.2**	**64**
Government	7.1	3.9	5.7	3.4	4.5	7.6	6.7	4	6.1
Co-operative Society	22	29.8	23.6	6.0	13.9	14.2	20.1	28.6	21.6
Commercial Banks	2.4	28.8	35.2	0.8	17.3	27.9	2.2	28	33.7
Insurance	0.1	0.4	0.2	0.2	-	0.6	0.1	0.3	0.3
Other Institutional Agencies		-	1.1	-	-	3.4	-	-	1.6
Non-Institutional	**68.3**	**36.8**	**30.6**	**89.2**	**63.3**	**40.6**	**70.8**	**38.8**	**32.7**
Landlord	8.1	3.7	3.7	12.6	8.4	4.9	8.6	4	4
Agriculturist Moneylender	23	8.3	6.8	23.8	11.4	8.2	23.1	8.6	7.1
Professional Moneylender	13.1	7.8	10.7	18.7	13.4	9.8	13.8	8.3	10.5
Trader	8.4	3.1	2.2	10.9	5.8	3.6	8.7	3.4	2.5
Relatives/Friends	13.1	8.7	4.6	19	14.4	8.8	13.8	9	5.5
Others	2.6	5.2	2.6	4.2	9.9	5.4	2.8	5.5	3.2
Unspecified	-	-	3.1	-	-	4	-	-	3.3
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: RBI Bulletin various issues.

Among the major sources of credit agencies, the rural cooperative banks were guided by the motivation of improving absorptive capacity of the credit delivery system. They were intended to facilitate credit flow for promotion and growth of agriculture and integrated rural development. They were also expected to support all other allied economic activities in rural areas, promoting sustainable rural development. However, their functioning has continued to deteriorate over the period and as of 2009 (Table 6), loans issued as a percentage of their total working capital was as low as 6.5 percent for the district co-operative banks and 16.75 percent for the state co-operative banks, both for the North-East regions of the country. At the all-India level, loans granted by District and State Cooperative Banks accounted for less than 50 percent of their total working capital. Punjab however, was a case where the state co-operative banks issued loans more than their total working capital.

Table 6: *Loans issued by State Co-operative and District Co-operative banks as a proportion of their total working capital, by regions,* 2009 (%)

Regions	District Co-operative Banks	State Co-operative Banks
Haryana	56.3	81.65
Delhi	N.A.	24.02
Chandigarh	N.A.	2.94
Himachal Pradesh	24.4	21.94
Jammu & Kashmir	10.5	5.26
Punjab	78.4	125.05
Rajasthan	56.9	48.82
North Zone	**58**	**69.86**
Arunachal Pradesh	N.A.	0.00
Assam	6.5	35.44
Manipur	N.A.	17.06
Meghalaya	N.A.	6.80
Mizoram	N.A.	13.56
Nagaland	N.A.	16.03
Tripura	N.A.	12.56
North East Zone	**6.5**	**16.75**
Andaman & Nicobar	N.A.	8.05
Bihar	14.1	16.39
Orissa	2.5	45.14
Sikkim	39.6	17.72
West Bengal	35.6	27.99
East Zone	**32.5**	**32.62**
Chhattisgarh	56.4	13.68
Madhya Pradesh	51.4	66.73
Uttar Pradesh	47.1	77.61
Central Zone	**48.5**	**60.14**
Goa	N.A.	47.12
Gujarat	41	32.64
Maharashtra	32.9	40.36
West Zone	**34.6**	**39.43**
Andhra Pradesh	32.4	44.21
Karnataka	58.9	52.60
Kerala	71.3	48.70
Puducherry	N.A.	85.40
Tamil Nadu	77.3	47.33
South Zone	**62.4**	**48.72**
Total	47.8	48.97

Note: N.A. = Not Available, Source: Own calculations from NABARD data.

To provide support for the rural population that struggles to arrange for the minimum start-up capital to initiate production, the government through an ordinance and later by legislation, announced the inception of the Regional Rural Banks (RRBs). A study of their performance reveals that though there has been an increase in the ground level credit disbursed by the RRBs, they are still out-performed by the cooperative banks (Table 7). This seems to be a commendable achievement on the part of the Co-operative Banks. It also confirms that the purpose of setting up the RRBs remains far from fulfilled. Note that, the general situation in the agricultural sector is likely to affect the rural credit alternatives in various ways, which is why the financial inter linkage can be of significance. On the production side, however, Foster and Rosenzweig (2004) previously argued that whenever there has been a productivity increase in the Indian agriculture, the consequent higher rural wage has discouraged rural industrialization. Thus, the supply side effect could not be compensated by greater demand for local goods through the increased income effect. Currently, the provision of rural employment guarantee schemes for all the states and union territories should also impart an artificial upward pressure on the rural wages and affect industrialization. Nevertheless, the demand effect may alone be strong enough to invite local industries.

Table 7: *State-wise Ground Level Credit (GLC) disbursed by Co-Operative and Regional Rural Banks as a Proportion of Total Credit Disbursed by these Institutions for Production (Crop Loan) states, regions and India (%* and Rs. Lakh*)*

States/UTs/Region	2008-2009		2009-2010		2010-2011	
	Cooperative Bank	RRB	Cooperative Bank	RRB	Cooperative Bank	RRB
Chandigarh	0	0	0	0	0	0
Delhi	100	0	100	0	100	0
Haryana	74.6	25.4	71.6	28.4	68.7	31.3
Himachal Pradesh	72.3	27.7	77.6	22.4	63.0	37.0
Jammu and Kashmir	40.4	59.6	37.6	62.4	0.9	99.1
Punjab	87.1	12.9	87.6	12.4	84.5	15.5
Rajasthan	56.2	43.8	54.8	45.2	57.7	42.3
Northern Region	**76.2**	**23.8**	**74.6**	**25.4**	**71.7**	**28.3**
Arunachal Pradesh	0	100	0	100	5.5	94.5
Assam	2.8	97.2	4.3	95.7	0.5	99.5
Manipur	0.0	100.0	0	0	100	0
Meghalaya	25.7	74.3	18.0	82.0	46.1	53.9
Mizoram	15.3	84.7	0.0	100.0	1.9	98.1
Nagaland	69.8	30.2	74.0	26.0	93.1	6.9
Tripura	1.8	98.2	1.8	98.2	1.8	98.2
Sikkim	100	0	100.0	0.0	100	0
North Eastern Region	**6.4**	**93.6**	**8.9**	**91.1**	**7.4**	**92.6**
Bihar	18.7	81.3	17.4	82.6	19.5	80.5
Jharkhand	0	100	0.0	100.0	0.0	100.0
Orissa	77.2	22.8	83.2	16.8	85.9	14.1
West Bengal	65.9	34.1	70.1	29.9	69.9	30.1
Andaman and Nicobar Islands	69.8	30.2	100	0	100	0
Eastern Region	**51.5**	**48.5**	**59.5**	**40.5**	**61.9**	**38.1**
Madhya Pradesh	62.8	37.2	66.6	33.4	69.7	30.3
Chhattisgarh	73.0	27.0	77.7	22.3	74.8	25.2
Uttar Pradesh	28.6	71.4	29.9	70.1	31.5	68.5
Uttarakhand	77.5	22.5	79.9	20.1	85.3	14.7
Central Region	**44.2**	**55.8**	**48.0**	**52.0**	**51.8**	**48.2**
Dadra and Nagar Haveli	0	0	0.0	0.0	0.0	0.0
Daman and Diu	0	0	0.0	0.0	0.0	0.0
Gujarat	81.6	18.4	82.0	18.0	81.3	18.7
Goa	100	0	100.0	0.0	100.0	0.0
Maharashtra	92.8	7.2	93.3	6.7	93.0	7.0
Western Region	**87.2**	**12.8**	**89.0**	**11.0**	**88.7**	**11.3**
Andhra Pradesh	40.9	59.1	51.3	48.7	52.9	47.1

Karnataka	60.1	39.9	53.9	46.1	50.0	50.0
Kerala	68.3	31.7	66.4	33.6	36.0	64.0
Lakshadweep	0	0	0.0	0.0	0.0	0.0
Puducherry	85.2	14.8	26.6	73.4	14.0	86.0
Tamil Nadu	64.6	35.4	62.4	37.6	56.7	43.3
Southern Region	**58.9**	**41.1**	**58.4**	**41.6**	**50.1**	**49.9**
India	**4023003**	**2241269**	**5694569**	**2980236**	**6452724.41**	**3780824**

Source: NABARD

3. The Rural Unorganized Manufacturing Sector

There are not enough studies on the credit options available to the unorganised sector. The unorganised manufacturing enterprises that are located in rural areas produce the same goods as their urban counterparts. In fact, NSSO gives the same industry groups for both the rural and urban enterprises. In earlier attempts, Marjit and Kar (2011) model various forms of interactions between the formal and the informal sector using empirical observations available from the NSSO. Among other things, they show that the informal wage may depend critically on the degree of capital mobility between the formal and the informal sectors, when there is a greater degree of homogeneity between the goods produced in formal and informal units spread across regions. It also suggests that depending upon sectoral complementarity, mobility of capital may raise the informal wages. Notwithstanding such possibilities, the credit scarcity remains a major problem for this sector. The need for larger start-up capital (compared to agriculture) makes this sector more dependent on the vagaries of credit agencies. According to NSSO, in 2005-06 the majority of rural unorganised manufacturing enterprises (42.4 percent) reported shortage of capital as the most crucial problem. A meagre 3 percent and 2 percent rural manufacturing enterprise received institutional and non-institutional loans, respectively.

A state-wise analysis of unorganised manufacturing enterprises shows that the proportion of enterprises obtaining institutional loan was highest in Dadra and Nagar Haveli, which was 23 percent, and the proportion of enterprises obtaining loan from non-institutional sources was highest in Pondicherry, at 7.3 percent (Table 8). This implies that access to credit is extremely limited for unorganised enterprises in rural areas.

Table 8: *Number per 1000 of rural enterprises by source of loans, by states and all India*, 2005-06

State/Union Territory	Loans		Total estimated no. of enterprises
	Institutional	Non-institutional	
Andhra Pradesh	51	37	1085242
Arunachal Pradesh	4	2	541
Assam	4	5	333006
Bihar	6	4	663379
Chhattisgarh	15	7	172610
Delhi	67	18	3639
Goa	167	19	4546
Gujarat	26	4	300753
Haryana	54	11	119687
Himachal Pradesh	75	11	100437
Jammu & Kashmir	7	2	140468
Jharkhand	13	3	540250
Karnataka	46	25	663211
Kerala	133	49	492777
Madhya Pradesh	15	7	564463
Maharashtra	92	51	556168
Manipur	11	8	35797
Meghalaya	0	0	34513
Mizoram	17	0	3291
Nagaland	17	34	7167
Orissa	14	11	870877
Punjab	27	5	150208
Rajasthan	28	9	400875
Sikkim	15	0	3684
Tamil Nadu	24	45	850353
Tripura	11	10	38900
Uttaranchal	60	3	53940
Uttar Pradesh	15	8	1704516
West Bengal	14	20	2223768
A & N Islands	82	37	1872
Chandigarh	95	0	753
D & N Haveli	230	0	797
Daman & Diu	3	0	1464

Lakshadweep	18	47	255
Pondicherry	118	73	4058
All India	30	19	12128266

Source: NSSO (2007)

An analysis at the level of each manufacturing industry in each state further shows that the highest amount of loan from moneylenders is taken in Chandigarh, followed by Delhi (Table 9). States and Union territories such as, Mizoram, Nagaland, Goa, Jharkhand, Sikkim, Daman and Diu, Dadra and Nagar Haveli do not have predominance of moneylenders. The interesting feature that emerges from this analysis is that, the prevalence of typical moneylenders is lower in those states where apart from formal institutions, credit is also available from the suppliers or contractors. In such a situation it may be interesting to identify the type of contracts that the owner of the enterprises enters into with the suppliers and contractor, in view of the high volatility that these units are usually exposed to.

Not surprisingly, therefore, according to the reports of National Commission for Enterprises in the Unorganised Sector (NCEUS, 2009) the overall availability of credit to the small unorganised enterprises as percentage of net bank credit (NBC) of the scheduled commercial banks has declined from 15.5 percent in 1996-97 to 6.6 percent in 2007-08. NCEUS finds that the growth in credit to the small-scale industry (SSI) that includes the micro enterprises or informal sector enterprises has not kept pace with the growth in NBC. In 2007-08, the share of SSI credit was only 6.6 percent of NBC compared to 15.2 percent in 1994-95 (Table 10).

Table 9: *Outstanding loans per rural manufacturing enterprise on the date of survey and annual interest payable per enterprise by source agency of loan for each State/UTs (in Rs),* 2005-06

State/UT	central and state level lending institution		Other institutional agencies		Money lenders		Business partner		Supplier/ contractor	
	amount	interest	Amount	interest	amount	interest	amount	interest	amount	interest
Andhra Pradesh	853	217	210	28	641	181	510	61	90	11
Arunachal Pradesh	7391	355	0	0	9	0	0	0	1715	133
Assam	361	63	104	16	81	88	3	2	15	1
Bihar	120	22	0	0	7	4	0	0	5	3
Chhattisgarh	19187	2499	21	3	205	264	769	45	2	0
Delhi	43765	19699	18	7	5897	530	0	0	0	0
Goa	124854	16880	4445	629	0	0	0	0	934	0
Gujarat	833	247	567	645	209	14	254	26	0	0
Haryana	23003	3197	2348	264	4134	3479	4549	503	1337	60
Himachal Pradesh	5475	1623	483	127	214	32	205	39	89	7
Jammu & Kashmir	705	95	67	66	0	0	2	1	280	2
Jharkhand	189	26	0	0	0	0	0	0	0	0
Karnataka	1948	540	109	33	175	63	1	0	9	0
Kerala	12892	1615	13622	838	1947	485	19	2	301	7
Madhya Pradesh	1384	476	5	1	147	125	116	8	40	3
Maharashtra	7449	1260	319	85	160	80	1124	124	117	3
Manipur	0	0	4	3	85	51	0	0	0	0
Meghalaya	45	33	4	3	4	3	0	0	0	0
Mizoram	1567	331	0	0	0	0	0	0	0	0
Nagaland	150	87	0	0	0	0	1	1	229	0
Orissa	571	82	196	24	111	25	0	0	3	0
Punjab	4055	571	69	44	693	93	262	31	30	1
Rajasthan	2303	465	671	50	1953	472	382	34	16	4
Sikkim	2828	741	0	0	0	0	0	0	0	0

Tamil Nadu	3016	893	317	166	1586	416	120	12	33	3
Tripura	963	569	0	0	62	23	29	0	102	0
Uttaranchal	16337	2657	0	0	24	7	167	5	0	0
Uttar Pradesh	723	292	2	2	174	87	134	61	88	0
West Bengal	1611	253	164	9	102	55	47	7	109	17
A & N islands	5500	543	0	0	235	118	0	0	3	0
Chandigarh	1909	10981	0	0	8219	54795	0	0	0	0
D & N Haveli	280	83	0	0	0	0	0	0	0	0
Daman & Diu	43	18	0	0	0	0	0	0	0	0
Lakshadweep	105	11	0	0	2343	844	0	0	0	0
Pondicherry	84404	9585	18889	2351	5504	852	12	1	487	0
All India	2654	495	736	82	454	164	220	30	83	6

Source: NSSO (2007).

Table 10: *Flow of Credit from Commercial Banks to SSI Sector,* (1994 – 2008)

Year	Net Bank Credit (Rs. Crore)	Annual Growth (%)	Credit to SSI (Rs. Crore)	Annual Growth (%)	SSI credit as % of NBC
1994-95	192424	-	29175	-	15.2
1995-96	228198	18.6	34246	17.4	15
1996-97	245999	7.8	38196	11.5	15.5
1997-98	297265	20.8	45771	19.8	15.4
1998-99	339477	14.2	51679	12.9	15.2
1999-2000	398205	17.3	57035	10.4	14.3
2000-01	467206	17.3	60141	5.4	12.9
2001-02	535063	14.5	67107	11.6	12.5
2002-03	668576	25	64707	-3.6	9.7
2003-04	664244	-0.6	71209	10	10.7
2004-05	877708	32.1	76592	7.6	8.7
2005-06	1266689	44.3	101285	32.2	8
2006-07	1763709	39.2	127323	25.7	7.2
2007-08	2361913	39.2	155804	22	6.6

Source: NCEUS (2009)

Next, we compare the per worker value of total emoluments, outstanding loans, gross value added (GVA), fixed capital and assets of the organized as well as the unorganized manufacturing sectors. Not surprisingly, we observe that the proportion of outstanding loans compared to GVA and the fixed assets of the unorganized sector is much lower than that of the organized sector. It also shows that the total emolument per worker is proportionately high for the organized sector (Table 11).

Table 11: *Per worker details of rural unorganized sector and the organized sector* (2005-06)

State / UT	Total Emoluments*		Outstanding Loans		GVA		Fixed Capital/Fixed Asset	
	Un organized	Organized	Un organized	Organized	Un organized	Organized	Un organized	Organized
Andhra Pradesh	3434	64341	1293	341888	19540	175588	17998	479734
Arunachal Pradesh	13995	N.A.	2471	N.A.	199637	N.A.	46361	N.A.
Assam	3254	55315	491	258245	20341	276560	12401	683445
Bihar	542	51409	97	688241	14882	30764	13980	513791
Chhattisgarh	3047	171672	9742	956978	18719	700127	19200	1867088
Delhi	77022	127136	11581	266946	4432648	274610	113879	298318
Goa	25604	153824	45192	769611	143609	973248	124249	1308519
Gujarat	7493	113944	1180	773064	46391	568555	21210	1785980
Haryana	12695	118367	22154	275060	73667	374605	79371	605874
Himachal Pradesh	4896	121474	4982	1060384	17649	1210626	47108	1947297
Jammu & Kashmir	3174	65621	1132	271379	43907	280565	35471	362363
Jharkhand	1188	198748	125	508594	12845	967791	8543	1655050
Karnataka	6090	112845	1265	486579	33482	348158	21960	876363
Kerala	12926	66150	14784	135560	31360	127906	46930	265816
Madhya Pradesh	2553	108824	919	602728	18329	344410	12345	1146271
Maharashtra	8829	17212	6096	721630	46895	735241	36145	1159745
Manipur	3524	23414	108	30969	19712	52191	22174	48847
Meghalaya	10843	81594	73	516074	36281	556108	14877	892088
Mizoram	3097	N.A.	1042	N.A.	40111	N.A.	27583	N.A.
Nagaland	1533	33483	1122	152587	34786	134868	31039	118045
Orissa	1037	127377	476	927352	8646	437987	5471	2141695
Punjab	5146	73390	3961	246105	46644	150790	57405	397032

Rajasthan	8476	88929	3331	484314	39564	284077	28357	715368
Sikkim	8589	N.A.	1733	N.A.	55941	N.A.	40857	N.A.
Tamil Nadu	8891	78357	2492	354413	36482	199022	33040	541468
Tripura	13896	20824	402	52438	27366	57718	5137	70159
Uttaranchal	10462	124927	9697	374417	27265	579428	48029	783538
Uttar Pradesh	3216	96999	704	482457	18896	260486	16331	751805
West Bengal	3094	98800	1303	620359	13965	171590	1073	629964
A & N Islands	18666	91844	10876	1637589	49915	-36170	58411	2590071
Chandigarh	17260	166129	5232	487966	70894	267787	148319	553507
D & N Haveli	16613	98727	139	1073063	48507	541344	38309	1310824
Daman & Diu	32866	105844	10	400933	145257	700457	73911	677400
Lakshadweep	11106	N.A.	1645	N.A.	34316	N.A.	21541	N.A.
Pondicherry	24560	115274	30160	331332	326083	840490	180059	705245

Note: (a) * = Total emoluments are calculated for all workers at the rates obtained by hired workers.
(b) N.A. = Not Available.
Source: calculated from NSSO and ASI data.

One of the interesting results that we come across is that in all the states and union territories the 'ratio of GVA to outstanding loans' as well as 'ratio of fixed assets to outstanding loans' is much higher in the informal sector compared to the formal sector.[4] Despite the fact that the gross value added and the value of fixed assets are often quite significant in the informal sector (Table 12), the existence of such a sector in the grey area between legality and illegality usually hinders free flow of formal capital. If the problem of interpretation that comes with the legal ambivalence of the informal sector could be minimized via appropriate institutional interventions, it may also be possible to use the fixed assets per informal unit as collateral against loans. In fact, for the states and union territories such as, Bihar, Jharkhand, Meghalaya, Manipur, Dadra and Nagar Haveli, Daman and Diu, fixed assets belonging to informal enterprises seem much better than what is reflected by their realized creditworthiness. The same applies if one analyses the GVA to outstanding loans in such enterprises. Overall, it seems that the problem of interpretation significantly stifles the access to credit for rural enterprises located in the informal sphere.

Table 12: *Per worker ratio of GVA and fixed capital/fixed assets to outstanding loans for organized and unorganized sector*, 2005-06

State / UT	Fixed capital or asset/Loans		GVA/Loans	
	Unorganized	Organized	Unorganized	Organized
Andhra Pradesh	13.9	1.4	15.1	0.5
Arunachal Pradesh	18.8	N.A.	80.8	N.A.
Assam	25.2	2.6	41.4	1.1
Bihar	143.6	0.7	152.8	0.0
Chhattisgarh	2.0	2.0	1.9	0.7
Delhi	9.8	1.1	382.8	1.0
Goa	2.7	1.7	3.2	1.3
Gujarat	18.0	2.3	39.3	0.7
Haryana	3.6	2.2	3.3	1.4
Himachal Pradesh	9.5	1.8	3.5	1.1
Jammu & Kashmir	31.3	1.3	38.8	1.0
Jharkhand	68.4	3.3	102.8	1.9
Karnataka	17.4	1.8	26.5	0.7

[4] In the absence of data on amounts of loan taken, we consider outstanding loans as a proxy for the amount of loan obtained by the enterprises.

Kerala	3.2	2.0	2.1	0.9
Madhya Pradesh	13.4	1.9	19.9	0.6
Maharashtra	5.9	1.6	7.7	1.0
Manipur	205.2	1.6	182.4	1.7
Meghalaya	202.8	1.7	494.6	1.1
Mizoram	26.5	N.A.	38.5	N.A.
Nagaland	27.7	0.8	31.0	0.9
Orissa	11.5	2.3	18.2	0.5
Punjab	14.5	1.6	11.8	0.6
Rajasthan	8.5	1.5	11.9	0.6
Sikkim	23.6	N.A.	32.3	N.A.
Tamil Nadu	13.3	1.5	14.6	0.6
Tripura	12.8	1.3	68.0	1.1
Uttaranchal	5.0	2.1	2.8	1.5
Uttar Pradesh	23.2	1.6	26.8	0.5
West Bengal	0.8	1.0	10.7	0.3
A & N Islands	5.4	1.6	4.6	0.0
Chandigarh	28.3	1.1	13.5	0.5
D & N Haveli	275.5	1.2	348.9	0.5
Daman & Diu	7515.3	1.7	14769.8	1.7
Lakshadweep	13.1	N.A.	20.9	N.A.
Pondicherry	6.0	2.1	10.8	2.5

Source: calculated from NSSO and ASI data.

4. Volatility in the Rural Informal Sector

It has been discussed above that the business of lending to the rural informal organizations is a high-risk proposition for banks. Uncertainty with regard to income sources of rural informal sector and evaluating their assets remain the foremost predicament for banks. The repayment capacity of rural borrowers, with their irregular and volatile income streams and expenditure patterns is also of serious concern that the formal lending agencies cannot ignore. Secondly, the transaction costs of rural lending in a country like India are high, mainly due to small loan sizes, the high frequency of transactions, the large geographical spread, the heterogeneity of borrowers, and widespread illiteracy. Thirdly, collaterals, which the rural borrowers lack, usually push them out of the purview of formal lending institutions. The borrowers from the rural informal sector either keep the output produced as collateral or their land. As we have already discussed, the volatility of crops (for cultivators) and manufacturing goods (for owners of small manufacturing enterprises) make them unacceptable to banks. Fourthly, the government's policies have worsened the lending conditions facing the banks in general, and in rural areas in particular. High fiscal deficits and statutory preemptions imposed on banks crowd out credit to the private sector. Persistent interest rate restrictions—floors on short-term deposit rates and lending rates, ceiling on small loans, etc. act like "implicit tax" on banks (Basu, 2006).

From the perspective of the rural poor too, dealing with formal sector banks prove to be immensely complex and problematic. Firstly, rural banks lack the flexibility of providing loans for goods and services that form the consumption basket given the diminutive income and expenditure patterns of small rural borrowers. Secondly, the transaction costs of dealing with formal banks are high. Procedures for opening an account or seeking a loan are cumbersome and costly (with high rejection rates). It is indicated by RFAS (2003) that clients often have to pay hefty bribes (ranging from 10 to 20 percent of the loan amount) to receive a loan. This makes the ultimate cost to borrowers very high. It takes, on average, thirty-three weeks for a loan to be approved by a commercial bank. Moreover, the predominance of land as collateral automatically excludes a huge section of tenant cultivators and marginal cultivators.

While much has been written about the lack of credit facility for agriculture in general, the reasons behind the lack of credit offered to rural manufacturing sector are relatively under-explored. One conjecture, as we have discussed in the preceding sections is the uncertainty of output and the associated transaction costs which could be an important reason behind the lack of access to credit. What we offer next, therefore, is a brief account of the extent of volatility of the rural informal manufacturing organizations in India to identify the reasons behind their lack of access to formal credits. Clearly, this is only one of the possible barriers facing formal financial institutions, the more well-known ones have been studied in substantial detail in various places.

Measuring Income Volatility of Rural Manufacturing Enterprises

To identify what exactly causes the banks to consider unorganized manufacturing enterprises as unworthy creditors, we tried to obtain an indicator of volatility of the unorganized manufacturing industries. To this end, we calculate the coefficient of variation in the fixed assets and gross value added (GVA) of the unorganized manufacturing industries between 2000-01 and 2005-06. This measure of dispersion helps us to identify the industry groups which have a volatile asset base and a volatile production base. It is well known that the coefficient of variation measures the extent of variability in relation to the mean of the population. The coefficient of variation is computed only for data measured on a ratio scale, which are measurements that can only take non-negative values.

Table 13: *Measure of Volatility of Fixed Assets and GVA, by industry.*

Industry	Coefficient of variation of assets	Coefficient of variation of GVA
Cotton ginning, cleaning and baling	0.19	1.21
Food products and beverages	0.33	0.47
Tobacco products	0.00	0.25
Textiles	0.26	0.50
Wearing apparel, dressing and dyeing of fur	0.17	0.53
Tanning and dressing of leather	0.45	0.71
Wood and of products of wood and cork	0.36	0.10
Paper and paper products	0.42	1.06
Publishing, printing and reproduction of recorded media	0.38	1.07
Coke, refined petroleum products and nuclear fuel	0.58	0.65
Chemicals and chemical products	0.12	0.72
Rubber and plastic products	0.54	0.83
Other non-metallic mineral products	0.04	0.35
Basic metals	0.82	0.85
Fabricated metal products, except machinery and equipment	0.42	0.64
Machinery and equipment N.E.C	0.44	0.72
Electrical machinery and apparatus N.E.C	0.23	1.05
Radio, television and communication equipment	0.80	1.32
Medical, precision and optical instruments, watches and clocks	0.80	1.18
Motor vehicles, trailers and semi-trailers	0.30	1.24
Other transport equipment	0.54	0.67
Furniture, Manufacturing N.E.C	0.42	0.81
Recycling	1.12	1.09

Note: N.E.C. =Not elsewhere classified.
Source: Own calculations from NSSO data.

Table 13 shows that across various industry classifications, the degree of volatility is quite high in terms of the GVA. Industries such as cotton ginning, cleaning and baling, publishing, printing and reproduction of recorded media, electrical machinery and apparatus, radio, television and communication equipments, medical precision and optical instruments, motor vehicles, trailers and semi-trailers, recycling show high volatility in their gross value added over the years.[5] On the other hand, industries as paper and paper products, tanning and dressing of leather, coke (coal), refined petroleum products and nuclear fuel, radio, television and communication equipments, medical precision and optical instruments, recycling have high volatility in their fixed asset base. Comparing these with the loans outstanding for each enterprise by source agencies for each industry (see appendix table A.1), we observe that the industries for which the availability of loans are low are also the ones which have a volatile asset base and are seldom the ones which have highly volatile GVA. Thus, it seems banks, while lending, tend to consider the asset base of these enterprises more important than their GVA. Since in case of informal manufacturing units banks can not hold output as collateral they tend to offer loans on the basis of the fixed assets of the units. Therefore, it can be concluded, at least from this exercise, that while volatility of GVA does not significantly explain the lower availability of loans to informal enterprises[6], the volatility in the asset base may be responsible for the lack of access to formal credit. As the asset base of the rural unorganized manufacturing industries are quite low and volatile at the same time, the banks in turn do not consider them creditworthy. It seems that in order to help these industries grow the government may play the role of a guarantor. It involves some risk-sharing arrangements between the banks and the governments and may turn out to be a better policy than loan write-offs or subsidies *en mass* that the government often pursues. It certainly requires more efficient and dedicated bureaucratic interference and management, which does not seem a

---

[5] Note that, these classifications of rural industries are directly obtained from the NSSO surveys of rural informal manufacturing sector in India.

[6] Here we are not looking into the general equilibrium aspects of linkages between rural industries and other sectors as agriculture. Therefore we do not delve into the causes of volatility of GVA of unorganised manufacturing sector and consider the source of volatility to be exogenous.

stumbling block given the vividly laid out rural and *panchayat* (local self-government) institutions in India. It may also device contracts or schemes specifically for the rural manufacturing sector to supply banks with greater information and hence, greater confidence on the borrowers.

Given the current trend of shifting from agriculture to manufacturing and services, it is also evident that rural unorganized manufacturing sector forms the spine of the rural economy. In such a situation, the government must facilitate the credit accessibility of these industries from banks and cooperatives.

5. The Micro-credit Linkage and Concluding Remarks

On the more traditional front, to mitigate some of the persistent obstructions in accessing credit in rural India, the role of micro credit or the system of peer-group lending seems to be a convenient way to nullify the problem of moral hazard pertaining to individual creditworthiness of the rural mass. Therefore, it is no surprise that in the absence of dedicated information, historically micro credit became an important avenue through which the government has tried to provide easy credit to the rural poor. In the event of withdrawal of formal banks from rural areas, the link between banks and self-help groups ensures some relief in terms of access to cheap credit. The increased financial alienation of the rural poor and its consequent effect on poverty and inequality led the government to launch a pilot program by NABARD in 1992, in an endeavor to increase the outreach of formal lending institutions, by linking 255 Self Help Groups (SHGs) with commercial banks. Apart from the direct institutional loans provided to the unorganized sector, micro credit entails a flow of indirect credit that is made available to unorganized sector enterprises (NCEUS, 2009). Micro credit is mainly disbursed through two different sources, first through SHG-Bank Linkage Programme and the second through Micro Finance Institutions (MFIs)[7]. While over 84 percent of micro credit is through SHG-bank linkage, remaining 16 percent of micro credit is routed through the MFIs (NCEUS, 2009). Therefore, officially micro credit remains an important linkage between formal sources of loan and the unorganised sector.[8] However, data on micro credit, other than those provided by official sources, remains scarce and erratic. Nonetheless, almost all sources agree to an increase in share of micro finance over the last two decades. Presently, we do not have the scope to discuss the role of micro credit in much detail.

---

[7] The government had also started the Swarnajayanti Gram Swarojgar Yojana in SHG method since April, 1999. Under this scheme, credit is provided to SHGs formed by the rural poor to establish micro enterprises (GoI, 2008).

[8] Note that, micro credits are often used for personal consumption rather than production. See Coleman (1999), Kaboski and Townsend (2005), McKernan (2002); Pitt, Khandker, Chowdury, and Millimet (2003), and Pitt and Khandker (1998) for developing countries in general. These studies focus on micro *entrepreneurial* credit rather than consumer credit. However, it appears that there are strong overlaps between small, closely-held businesses and the households that run them. This gives rise to the possibility that micro entrepreneurial loans are often used for consumption smoothing (Morduch 1998; 1999).

Table 14: *Number of Self Help Groups financed by banks and the amount of loan disbursed under the SHG-bank linkage program*, (Number and Rs. Crore)

Years	No. of SHGs financed by banks	Bank Loan
1992-93	255	0.29
1993-94	365	0.36
1994-95	1502	1.79
1995-96	2635	3.62
1996-97	3841	5.78
1997-98	5719	11.92
1998-99	18678	33.31
1999-00	81780	135.91
2000-01	149050	287.89
2001-02	197653	545.47
2002-03	255882	1022.33
2003-04	361731	1855.53
2004-05	539365	2994.26
2005-06	620109	4499
2006-07	1105749	6570
2007-08	1227770	8849.26
2008-09	1609586	12253.51
2009-10	1586822	14453.3
2010-11	1196134	14547.73

Source: NABARD

In spite of the fact that SHGs helped credit outreach to the rural poor extensively, and helped ensure a more stable business and livelihood, performance of SHGs remain a moot subject. The existence of private players who provides micro credit apart from the commercial banks are often reported to have led to exploitation of the members of the SHGs by charging usurious rates of interest. In fact, studies on the performance of microfinance remain diverse. Some have cited equity, outreach and good recovery rate as the major affirmative aspects of the SHGs, whereas several others indicate the exploitative effects of usurious rates of interest that it charges.

It should be remembered, however, that microcredit through self-help groups do not automatically address the problems of enforcement and collateral directly and therefore the peer lending effect, that it is founded on, might not generate the desired outcomes in many cases. It nevertheless, lowers the burden of moral hazard quite successfully as has been epitomized by the success of Grameen Bank in Bangladesh. On the same note, the functioning of microcredit as the most vibrant link between formal credit and rural unorganized industries may suffer from institutional inefficiencies, whereby the credit disbursement mechanism may itself be faulty and biased. In a well-known study for the Philippines, Ashraf, Karlan and Yin (2006) show that microfinance was targeted only to the already established units, neglecting the prospective businesses completely in the process. Consequently, these units got access to more capital, made more profits and even laid-off the relatives and dependents who they initially considered as social responsibility.

The present paper therefore, discussed many such findings and tried to delineate the linkage between rural unorganized sector and the sources of formal finance. We also offered a cross-industry study of the degree of volatility faced by rural unorganized firms and how that might affect access to finance. Interestingly, the volatility of the assets base in rural unorganized sector appears to be a major stumbling block as to why the formal lending agencies do not find them attractive. In this regard, we wish to reiterate that for developing countries like India, there is a long-standing problem of the enforcement of property and legal rights, which has a strong bearing on the functioning of businesses and entrepreneurship and consequently the access to credits and formal linkages. The not-so-unusual business, bureaucracy and corruption nexus often helps to bypass the problems of rights and enforcement in poor countries via use of money or power. However, the general condition remains worrisome. It is hard to see how the economic environment of a country can continue to remain de-linked from pressing aspects in legality and governance which seems to be at the core of the formal-informal argument critically influencing the observed production organization associated with it. These highlight some of the directions in which this debate may enrich itself for the developing countries in general.

References

Ashraf, N, D. Karlan and W. Yin (2006), "Tying Odysseus to the Mast: Evidence from a Commitment Savings Product in the Philippines", *Quarterly Journal of Economics*, Vol. 121, No. 2, pp. 635-672.

Banerjee, A. and A. Newman (1993), "Occupational Choice and the Process of Development", *Journal of Political Economy*, Vol. 101, pp. 274-298.

Basu, K. (1997), *Analytical Development Economics: The Less Developed Economy Revisited*, New Delhi, Oxford University Press.

Basu, P. (2006), "Improving Access to Finance for India's Rural Poor", Report No. 36448, The World Bank, Washington.

Burgess, R. and R. Pande (2004), "Can Rural Banks Reduce Poverty? Evidence from the Indian Social Banking Experiment", *American Economic Review,* Vol. 95, pp. 780-795.

Burgess, R., R. Pande, and G. Wong (2005), "Banking for the Poor: Evidence from India", *Journal of the European Economic Association,* Volume 3, Issue 2-3, pp. 268–278.

Chavan, P. (2005), "How 'Inclusive' Are Banks under Financial Liberalisation?", *Economic and Political Weekly,* pp. 4647-49.

Coleman, B. (1999). "The Impact of Group Lending in Northeast Thailand," *Journal of Development Economics,* Vol. 45, pp. 105-41.

EPW Research Foundation (2007), "Rural Credit Structure Needs Genuine Revitalisation", *Economic and Political Weekly*, Vol. 42, No. 20, pp. 1802-1808.

Foster, A. and M. R. Rosenzweig, (2004), "Agricultural Productivity Growth, Rural Economic Diversity, and Economic Reforms: India, 1970–2000", *Economic Development and Cultural Change*, Vol. 52, pp. 509–542.

Government of India (1991), National Sample Survey Organisation, *All India Debt and Investment Survey*. Mumbai.

Government of India (2002), National Sample Survey Organisation, *All India Debt and Investment Survey*. Mumbai.

Government of India (2007), National Sample Survey Organisation, "Unorganised Manufacturing Sector in India: Input, Output and Value Added 2005-06", 62nd Round, Report No. 526(62/2.2/3).

Government of India (2007), National Sample Survey Organisation, "Operational Characteristics of Unorganised Manufacturing Enterprises in India 2005-06", 62nd Round, Report No. 524(62/2.2/1).

Government of India (2008), "A Report on the Success and Failure of SHG's in India – Impediments and Paradigm of Success", Planning Commission, New Delhi.

Jagan Mohan, V. (2004), "Regional Rural Banks (RRBs): The Vehicles for Bridging the Banking Divide," *State Bank of India Monthly Review*, XLIII, pp 21-41.

Jeromi, P. D. (2007), "Regulation of Informal Financial Institutions: A Study of Money Lenders in Kerala", Reserve Bank of India Occasional Papers, Vol. 28, No. 1.

Kaboski, J and R. Townsend (2005), "Policies and Impact: An Analysis of Village-Level Microfinance Institutions", *Journal of the European Economic Association,* Vol. 3, No 1, pp. 1-50.

Marjit, S and S. Kar (2011), *The Outsiders: Economic Reforms and Informal Labor in a Developing Country*, Oxford University Press, New Delhi.

Morduch, J. (1998), "Does Microfinance Really Help the Poor? New Evidence on Flagship Programs in Bangladesh", MacArthur Foundation project on inequality, Princeton University, draft.

Morduch, J. (1999), "The Microfinance Promise," *Journal of Economic Literature,* Vol. 36, pp. 1569-1614.

Nair, T. (2000), "Rural Financial Intermediation and Commercial Banks: Review of Recent Trends", *Economic and Political Weekly*, Vol. 35, No. 5, pp. 299-306.

National Bank for Agricultural and Rural Development (2002-03), Annual Report, Mumbai.

National Commission for Enterprises in the Unorganised Sector (2009), "The Challenge of Employment in India - An Informal Economy Perspective", Government of India, New Delhi.

Pitt, M and S. Khandker (1998), "The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?" *Journal of Political Economy,* Vol. 106, No. 5, pp. 958-96.

Pitt, M, S. Khandker, O. Haider Chowdhury and D. Millimet (2003), "Credit Programs for the Poor and the Health Status of Children in Rural Bangladesh", *International Economic Review,* Vol. 44, No. 1, pp. 87-118.

Ray, D. (1998), *Development Economics*, New Jersey, Princeton University Press.

Reserve Bank of India (2012), Database of Indian Economy, http://dbie.rbi.org.in/DBIE/dbie.rbi?site=home

Reserve Bank of India (2006), Annual Policy Statement for the Year 2006-07.

Rural Financial Access Survey (2003), Published by National Council of Applied Economic Research (NCAER), India.

Sinha, A. (1976), "Moneylenders' Reign of Terror", *Economic and Political Weekly*, Vol. 11, No. 3, pp. 53.

APPENDIX

Table A.1: *Outstanding Loan per Enterprise on Date of Survey by Source Agency of Loan for Each Industry, Rural India,* 2005-06 (Rs.)

Industry	Central and state level lending institution	Other institutional agencies	Money lenders	Business partner	Supplier/ Contractor	Friends and Relatives	Others	Total
Cotton ginning, cleaning and baling	7915	0	954	91	2162	760	0	11882
Food products and beverages	4664	3387	821	349	182	583	334	10320
Tobacco products	20	0	22	0	2	1	1	47
Textiles	2046	57	315	2	83	228	32	2763
Wearing apparel, dressing and dyeing of fur	457	81	92	10	9	97	2	749
Tanning and dressing of leather	2075	0	1012	0	44	55	40	3225
Wood and of products of wood and cork	499	76	182	18	29	83	16	903
Paper and paper products	3734	29	212	3245	36	1038	1	8296
Publishing, printing and reproduction of recorded media	14439	827	3111	553	9	2156	333	21428
Coke, refined petroleum products and nuclear fuel	69918	0	2191	0	0	115	9751	81974
Chemicals and chemical products	5029	1177	654	21	250	1505	212	8848
Rubber and plastic products	68530	12801	4927	9818	1411	23352	457	121296
Other non-metallic mineral products	6432	1044	2389	826	83	830	610	12214
Basic metals	221303	5287	13829	8373	5768	5808	2121	262489
Fabricated metal products, except machinery and equipment	5168	210	387	12	48	559	24	6407
Machinery and equipment N.E.C	3544	324	601	1153	500	3479	271	9873
Electrical machinery and apparatus N.E.C	14310	220	794	11850	756	778	401	29110
Radio, television and communication equipment	406133	0	11743	0	0	2	0	417878
Medical, precision and optical instruments, watches and clocks	157052	455	1374	0	3195	15338	75	177488

Motor vehicles, trailers and semi-trailers	81394	1800	5809	0	0	6828	0	95832
Other transport equipment	7443	7	889	0	8	1847	370	10563
Furniture, Manufacturing N.E.C	3154	88	842	28	98	540	102	4852
Recycling	6460	0	2798	0	0	390	0	9647

Source: NSSO.

A.2 The definition of factories in Factories Act, 1948, is as follows (also adopted by NSSO):

2m (i) and 2m (ii) of Factories Act, 1948 describes a "factory" as any premises including the precincts thereof-

(i) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or

(ii) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on, but does not include a mine subject to the operation of 3[the Mines Act, 1952 (35 of 1952),] or 4[a mobile unit belonging to the armed forces of the Union, a railway running shed or a hotel, restaurant or eating place].